

Taking Emergency Action for Suspect Asian Gypsy Moth (AGM) Ships

The purpose of the emergency action is to prevent the artificial spread of Asian Gypsy Moth (AGM), *Lymantria dispar*, from high-risk areas including Far East Russian and Japanese ports where AGM populations are at high densities. Inspection and exclusion of contaminated ships will prevent the artificial spread of AGM.

The AGM displays significant behavioral differences compared to the North American gypsy moth (NAGM). The female AGM is an active flyer that is attracted to lights, and capable of flying up to 25 miles. The AGM feeds on larch and other conifers as well as on alder and willow. Oaks and other hardwood species are also acceptable hosts.

The female AGM lays eggs during August and September in Far East Russian and Japanese ports. Attracted by the lights on ships, the females may lay eggs on the superstructure. The larvae can be blown by the wind short distances on silk strands. Due to these characteristics, a list of vessels that called in Far East Russian and Japanese ports between July 15 and September 30 of the previous year has been developed: the AGM Vessel Alert List.

APHIS asks shipping interests **not** to charter ships that called at Far East Russian or identified high-risk Japanese ports during the egg laying period for voyages that would put the ships in U.S. or Canadian ports during the high-risk egg hatching period. Any ship that arrives during this period that is found infested will be ordered to leave U.S. waters immediately.

Although APHIS has no regulation prohibiting the entry of AGM high-risk ships, the Plant Protection Act grants the authority to order infested ships to leave U.S. waters.

Determine Status of Arriving Ships

Determine which ships should be excluded entry, which should be boarded on arrival, and which require normal, non-AGM boarding procedures. These procedures use two types of exclusion: (1) If a pest is found, CBP has the authority to order a ship to leave U.S. waters (a mandatory exclusion); and (2) PPQ requests the shipping industry **not** to bring ships which have been in Far East Russian or identified high-risk Japanese ports between July 15 and September 30 of the previous year into U.S. ports during the high-risk hatching period. This is a voluntary exclusion. A narrative description of the main steps involved in determining your action follows. See [Table 3-3-14 on page 3-3-27](#), and [Table 3-3-15 on page 3-3-27](#) which summarize the action.

EXEMPTION: Hawaii, Puerto Rico, and Guam are exempt from excluding entry to ships because the climate and host conditions are **not** suitable for AGM. Therefore, throughout the year, ships from Far East Russian and identified high-risk Japanese ports are allowed to arrive in Hawaii, Puerto Rico, and Guam subject to inspection. If the ship's schedule includes subsequent continental U.S. ports of call, then the ship must be inspected for AGM.



Southern ports need to be more aware of AGM inspection of ships year round. There is a possible risk of larvae hatching in these warmer climates even during the months which are **not** considered the high-risk hatching period.

Step 1: Check the AGM Vessel Alert List

Check the AGM vessel alert list <http://www.aphis.usda.gov/ppq/ispm/gm/agmlist2004-2.html> for the ship's name and hull number to determine if the ship is high risk for AGM. The AGM vessel alert list includes ships that called at a Far East Russian or identified high-risk Japanese port July 15 through September 30 of the previous year.

If a ship arrives which has a name very similar to one on the alert list, check with the agent to verify the hull number or the itinerary of the ship between July 15 and September 30 of the previous year. The alert list is **not** all inclusive, so apply the ship risk criteria to all arrivals (Step 3).

The alert list of AGM suspect ships will be entered in the U.S. Coast Guard's look out data base (MSIS). The U.S. Coast Guard will notify the local CBP office when an AGM suspect ship reports to a port.



A ship's name may change, but a ship's hull number **never** changes.

Step 2: Check the Ship's Itinerary

Check the ship's itinerary for a Far East Russian port that occurs within the range from Posyet to Nikolayevsk. The three most likely ports are Nakhodka, Vladivostok, and Vostochnyy.



If strange names are on the itinerary, get a map of the high-risk area (extreme southeast mainland of Russia) and match any listed ports.

Check the ship's itinerary for a high risk Japanese port. The list of high risk Japanese ports includes Kishiwada, Sakata, Hakodate, Otaru, Nagahama, Chiba, Kanazawa, and Toyama-shin.

Refer to definitions in the Introduction for a non-inclusive list of ports of the high risk area. Northern Chinese ports and Korean ports may also be suspect.



Verify when the ship called at the Far East Russian or Japanese port. Did it call at the port between July 15 and September 30?

Step 3: Apply Criteria to Arriving Ships

Refer to [Table 3-3-13 on page 3-3-25](#) to determine the level of risk based on the ship's date of arrival.

TABLE 3-3-13: Asian Gypsy Moth Inspection Periods at U.S. Ports for Ships Arriving from Far East Russian or High-Risk Japanese Ports

Port Location		Date of Arrival											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Great Lakes, Puerto Rico, and West Coast	Alaska												
	California												
	Great Lakes												
	Hawaii												
	Oregon												
	Puerto Rico												
	Washington												
Atlantic Coast	Norfolk, VA and northward												
	South of Norfolk, VA to Jacksonville, FL												
	South of Jacksonville, FL												
Gulf Coast	Alabama, Florida, Louisiana, Mississippi, and Texas												

 Remote inspection required during this high-risk period
 Remote inspection **not** required during this low-risk period

High-risk Ships—Determine which arriving ships are high risk and are excluded entry. These ships can be boarded instream or at preapproved remote sites.

Consider high risk a ship arriving at a continental U.S. port during the high-risk period identified in [Table 3-3-13 on page 3-3-25](#) and **one** of the following conditions exist:

- ◆ Specifically identified on the AGM vessel alert list
- ◆ Itinerary included a Far East Russian or high-risk Japanese port where the ship called between July 15 and September 30 of the previous year
- ◆ Itinerary that cannot adequately verify the location of the ship between July 15 and September 30 of the previous year

If you determine an arriving ship to be high-risk, go to [Exclude Entry to High-Risk Ships on page 3-3-26](#).

Low-risk Ships—Determine which arriving ships are low risk and are allowed to proceed to the intended berth for initial AGM inspection and follow-up monitoring, if necessary.

Consider low risk a ship arriving at a continental U.S. port during the low-risk period identified in [Table 3-3-13 on page 3-3-25](#) and with **one** of the following:

- ◆ Specifically identified on the AGM vessel alert list
- ◆ Itinerary including an identified high risk Japanese port where the ship called between July 15 and September 30 of the previous year
- ◆ An itinerary that cannot adequately verify the location of the ship between July 15 and September 30 of the previous year

If you determine an arriving ship to be low-risk, go to [Table 3-3-15 on page 3-3-27](#).

Exclude Entry to High-Risk Ships

Every effort should be made to encourage voluntary exclusion of ships identified as high-risk AGM ships arriving at a U.S. port during the high-risk hatching period.

During the high-risk hatching period, inspection can be accomplished by boarding instream or at preapproved sites. Provide options to inspect or to conduct an initial evaluation at a remote location. This option provides the mutual benefit of reducing the risk or pest introduction and of saving money for the shipping industry by reducing the possibility of a ship being ordered out of U.S. waters after traveling inland waterways. Boarding a ship instream is an option which must be requested by the agent and approved by CBP. All arrangements concerning transportation to the ship and the method of boarding should be confirmed before the trip to the ship begins.

If the ship is found to be free of suspect AGM egg masses and larvae, allow the ship to proceed to its intended berth. While in port, monitor the ship daily for hatching AGM larvae.

See [Table 3-3-14 on page 3-3-27](#), which summarizes the procedures for determining which action to take for ships arriving during the high-risk hatching period.

TABLE 3-3-14: Procedures to Follow for Ships Arriving During High-Risk Period

If ship's name is:	And the itinerary:	And called at port:	And certification ¹ :	Then:
Not on the alert list	Includes a Far Eastern Russian or high-risk Japanese port	Between July 15 and September 30	Is absent	<ul style="list-style-type: none"> ◆ ENCOURAGE voluntary exclusion ◆ PROVIDE options for inspection outside the port area
			Is present	◆ ALLOW movement to berth
		Other than the time of year above	→	◆ BOARD on arrival or at sunrise
	Does not include a Far Eastern Russian or high-risk Japanese port	→	→	REQUIRE standard, non-AGM boarding procedures
	Cannot be ascertained	→	→	◆ ENCOURAGE voluntary exclusion
On the alert list	→		Is absent	◆ PROVIDE options for inspection outside the port area
			Is present	<ul style="list-style-type: none"> ◆ ALLOW movement to berth ◆ BOARD on arrival or at sunrise

1 Certificate must be from the State Plant Quarantine Service of Russia and declare that the vessel is free of Asian gypsy moth (AGM).

TABLE 3-3-15: Procedures to Follow for Ships Arriving During Low-Risk Period

If ship's name is:	And the ship's itinerary:	Then:
On the alert list	→	<ul style="list-style-type: none"> ◆ ALLOW movement to berth ◆ BOARD on arrival or at sunrise
Not on the alert list	Includes a Far East Russian or high-risk Japanese port	
	Does not include a Far East Russian or high-risk Japanese port	REQUIRE normal, non-AGM boarding procedures
	Cannot be ascertained and it's a Russian or Japanese flag ship	<ul style="list-style-type: none"> ◆ ALLOW movement to berth ◆ BOARD on arrival or at sunrise

Board Instream—Boarding ships instream is a nonstandard procedure. If instream boarding has been approved, then use the following guidelines:

1. Request the ship's agent or the U.S. Coast Guard (at particular sites) to arrange for and provide boarding and retrieval launch, and a suitable boarding method. U.S. Coast Guard units at ports without sufficient resources to transport CBP officers can provide CBP with a list of certified, commercial marine taxis or launch services.
2. Wear a U.S. Coast Guard approved flotation jacket.
3. Board the ship on arrival, within 1 hour after sunrise and 3 hours before sunset.
4. Board by conventional gangway or another method judged safe by the boarding officers.

Order a Ship to Leave—When ordering a ship to leave U.S. waters, issue PPQ Form 523, Emergency Action Notification (see [Table A-1-27](#) on [page A-1-66](#) for instructions on completing the form). Request the ship's master to prepare for and execute an immediate departure. The notification will instruct the ship's agent to immediately call out necessary tugs, linesmen, and pilots for the ship's departure. The only actions allowed are those that make the ship seaworthy, such as bunkering.

Board Low-Risk Ships

During the low-risk period, board suspect AGM ships on arrival or within 1 hour of sunrise if the ship arrives during the night. Inspect all accessible areas of the ship's super-structure. Use binoculars to inspect unreachable areas of the ship. Inspect the ship's hold(s) when there are indications (physical evidence on the superstructure or ship records) that the ship has been cleaned for AGM. If possible, at least two officers should inspect the ship.

Inspect Suspect AGM Ships

Step 4: Look for Egg Masses

Inspect all accessible areas of the ship's super-structure. Use binoculars to inspect unreachable areas of the ship. Inspect the ship's hold(s) when there are indications (physical evidence on the superstructure or ship records) that the ship has been cleaned for AGM. Egg masses are the most likely life stage to be found on the superstructure of ships. During March through August, hatching larvae can be found. Hatching larvae present an **unacceptable** pest risk any time of the year at any U.S. port.

Use USDA/APHIS Program Aid Number 1329, *Don't Move Gypsy Moth*, for identifying life stages of gypsy moths.

The following points will help you detect gypsy moths:

- ◆ Egg masses normally are deposited in sheltered locations such as in crevices or cavities, under tarps, behind walls and doors, and underneath the hold rims
- ◆ Binoculars may allow you to see unreachable areas of the ship
- ◆ Female AGMs are attracted to light; therefore, the female moths could lay their egg masses on surfaces of the ship that are exposed to night lights. However, if the ship was lit with shore-based flood lights while in a Far East Russian port, egg masses could be found in all locations
- ◆ Viable egg masses on ships may be weathered, darkened, and appear old
- ◆ Look for evidence of fresh paint covering scrapes on walls or painted over egg masses
- ◆ Look for hatching larvae that may be blowing on silk strands from the ship. Peak hatching of eggs is in the morning. Dispersing larvae move toward vertical structures and climb rapidly

Use [Table 3-3-16](#) to determine action to take when inspecting suspect AGM ships or ships with Far East Russian or high-risk Japanese ports of call.

TABLE 3-3-16: Inspect AGM Ships or Ships with Far East Russian or High-Risk Japanese Ports of Call

If the month is:	And you find:	Then:
High-risk hatching period	Egg masses or hatching larvae	CONTACT PPQ, QPAS through appropriate channels, who may instruct you to order the ship to leave ¹ (refer to the guidelines under Order a Ship to Leave on page 3-3-28)
	No life stages of AGM	<ul style="list-style-type: none"> ◆ ALLOW the ship to dock and conduct business ◆ REQUIRE daily monitoring for hatching larvae of AGM until the ship leaves the U.S. port
Low-risk hatching period	Egg masses	CONTACT PPQ, QPAS through appropriate channels, who will determine final regulatory action based on level of infestation and guidance from management
	Hatching larvae	CONTACT PPQ, QPAS through appropriate channels, who may instruct you to order the ship to leave ¹ (refer to the guidelines under Order a Ship to Leave on page 3-3-28)
	No life stages of AGM	<ul style="list-style-type: none"> ◆ ALLOW the ship to dock and conduct business ◆ MONITOR the ship while in port

1 Depending on the life stage found and the host material present at the port, ordering a ship to leave may spread AGM over a larger area than allowing the ship to stay at the berth.

Step 5: Treat Egg Masses

If required by PPQ, QPAS, drench the egg masses with *Golden Pest Spray Oil* registered for gypsy moth. This product is available from Stoller Enterprises, Inc., 4001 W. Sam Houston Pkwy N., Houston, TX 77043-1213; telephone number (713) 461-4407, FAX (713) 461-4467.

Application Technique—Mix equal amounts of *Golden Pest Spray Oil* and water and apply to egg masses as a 50% mix. Make a new mix each day treatments are made. Using a small hand sprayer, apply the mixture to individual egg masses until they are completely saturated. Keep the mixture agitated while treating.

Establish contingency plans for quick availability of commercial spray equipment for large applications. Port Directors should work with port authorities and/or ships' agents to arrange for commercial pesticide applicators to be on standby in the event they are needed to apply the treatment. Commercial application will be at the expense of the agent, ship, or port authority.

If a sample of egg masses is needed for identification, then remove a few egg masses from the ship. Using a knife, paint scraper, or putty knife, scrape a few egg masses from the ship's surface and place into a container. **Be careful not to drop egg masses into the water.**

Properly preserve, package, and send larvae to the Otis CPHST laboratory for confirmation through DNA analysis. Address the interceptions:

Asian Gypsy Moth Analysis
Otis Plant Protection Laboratory
USDA/APHIS
Building 1398
Otis ANGB, MA 02542
Telephone 508-563-9303

Step 6: Monitor Ships

Monitor ships **daily** that have been allowed to dock until they leave the port.



Peak hatching of gypsy moth eggs is in the morning. Check the ship for dispersing larvae. These larvae move toward vertical structures and climb rapidly.

Step 7: Report Inspection Results

To report inspection results, do as follows:

1. Each CBP Office must report inspection results to PPQ, QPAS. **FAX these results within one week** to (301) 734-5269. Please include a copy of PPQ Form 288 and all pertinent paperwork (like the Certificate of Inspection from Russia and the official itinerary from the Captain).
2. Clearly identify the information with the title, “AGM Ship Inspection.”
3. Include the following information regarding AGM ship inspections:
 - ❖ Ship Name
 - ❖ Flag
 - ❖ Port
 - ❖ Date of Inspection
 - ❖ Result of Inspection—positive (life stage found) or negative (action taken)—brief statement

PPQ Form 288, Ship Inspection Report on page A-1-38, can be used to document the above information. Note in *Remarks* the results of inspection and the action taken.

The Canadian Food Inspection Agency (Ottawa) will notify Quarantine Policy, Analysis and Support (QPAS) of their AGM ship inspection results. QPAS will in turn notify CFIA of U. S. AGM ship inspection results. This information will be used by both countries to update the AGM Vessel Alert List. Updates to the AGM vessel alert list will be posted on the PPQ gypsy moth website (<http://www.aphis.usda.gov/ppq/ispm/gm/>) as changes occur.

